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EXAMINER

BELL, MELTIN

ART UNIT

PAPER NUMBER

2121

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/853,821

Applicant(s)

SPOONER ET AL.

Examin r

Meltin Bell

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-- Th MAILING DATE of this communication app ars on th cov r sh t with the correspond nc addr ss --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 1-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/17/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to application **09/853,821** filed 05/14/2001 as well as the Application Data Sheet (ADS), Information Disclosure Statement (IDS) and Amendment filed 9/17/04. Claims 25-48 filed by the applicant have been entered and examined. An action on the merits of claims 25-48 appears below.

Priority

Applicant's claim for domestic priority against application number 09/064,824 filed **4/23/98** now USPN 6,256,618 under 35 U.S.C. 119(e) is acknowledged.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Office presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not

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commonly owned at the time a later invention was made in order for the Office to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 25-30 and 39-43 are rejected under 35 U.S.C. 103(a) as being obvious over *Maes* "Concepts and experiments in computational reflection" (December 1987) in view of *Simonyi* USPN 5,911,072 "Method and system for reducing an intentional program tree represented by high-level computational constructs" (Filed June 27, 1997) and in further view of *Woodbury et al* "Self-activation and representation in systems integration" (9-11 Aug. 1990).

Regarding claim 25:

Maes teaches,

- receiving the user input (page 148, section 3, paragraph 1) from a user (page 153, right column, paragraph 3)
- matching (page 148, section 4, paragraph 3 and page 149, left column, paragraph 1) concept representatives (page 151, left column, paragraph 2) to the user input using experimentation (page 150, section 6, paragraph 2; page 148, left column, paragraph 3)

However, *Maes* doesn't explicitly teach matching concept representatives to the user input using experimentation to result in a source tree while *Simonyi* teaches,

- receiving the user input from a user (Figs. 2A, 6; column 5, lines 14-17, "The editor provides... IP tree 2B06")
- matching concept representatives to the user input to result (column 26, lines 23-39) in a source tree (column 20, lines 8-15)

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Woodbury et al teaches,

- self-activating (Abstract) the source tree (page 48, paragraphs 3-4) to interpret the user input (page 50, paragraph 6 and page 51, paragraph 1)

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for transforming an intentional program tree into a reduced program tree (*Simonyi*, Abstract) and explicitly specifying the conditions under which activation could occur (*Woodbury et al*, page 50, paragraph 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Maes* as taught by *Simonyi* and *Woodbury et al* for the purpose of transforming an intentional program tree into a reduced program tree and explicitly specifying the conditions under which activation could occur.

Regarding claim 26:

The rejection of claim 26 is the same as that for claim 25 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 27:

The rejection of claim 27 is similar to that for claim 25 as recited above since the stated limitations of the claim are set forth in the references. Claim 27 limitations difference is taught in *Simonyi*:

- the concept representative includes instructions (column 1, lines 23-61, "Computer programs are...by the computer")

Maes:

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- the concept representative includes instructions for obtaining the source tree (page 154, left column, paragraphs 2-4)

Regarding claim 28:

Maes teaches,

- means for receiving the user input (page 148, section 3, paragraph 1) from a user (page 153, right column, paragraph 3)

- means for matching (page 148, section 4, paragraph 3 and page 149, left column, paragraph 1) concept representatives (page 151, left column, paragraph 2) to the user input using experimentation (page 150, section 6, paragraph 2; page 148, left column, paragraph 3)

However, *Maes* doesn't explicitly teach means for matching concept representatives to the user input using experimentation to result in a source tree while *Simonyi* teaches

- means for (Figs. 2A, 6) matching concept representatives to the user input to result (column 26, lines 23-39) in a source tree (column 20, lines 8-15)

Woodbury et al teaches,

- means for (page 48, paragraph 1) self-activating (Abstract) the source tree (page 48, paragraphs 3-4) to interpret the user input (page 50, paragraph 6 and page 51, paragraph 1)

Motivation - The portions of the claimed system would have been a highly desirable feature in this art for transforming an intentional program tree into a reduced program tree (*Simonyi*, Abstract) and explicitly specifying the conditions under which activation could occur (*Woodbury et al*, page 50, paragraph 4). Therefore, it would have been

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obvious to one of ordinary skill in the art at the time the invention was made, to modify *Maes* as taught by *Simonyi* and *Woodbury et al* for the purpose of transforming an intentional program tree into a reduced program tree and explicitly specifying the conditions under which activation could occur.

Regarding claim 29:

The rejection of claim 29 is the same as that for claim 28 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 30:

The rejection of claim 30 is the same as that for claims 28 and 27 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 42:

The rejection of claim 42 is similar to that for claim 30 as recited above since the stated limitations of the claim are set forth in the references. Claim 42's limitations difference is taught in *Simonyi*:

- the computer language code is in a high level language (column 1, lines 36-61)

Regarding claim 39:

Maes teaches,

- means for receiving the user input (page 148, section 3, paragraph 1) from a user (page 153, right column, paragraph 3)
- means for matching (page 148, section 4, paragraph 3 and page 149, left column, paragraph 1) concept representatives (page 151, left column, paragraph 2) to the user

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input using experimentation (page 150, section 6, paragraph 2; page 148, left column, paragraph 3)

However, *Maes* doesn't explicitly teach means for matching concept representatives to the user input using experimentation to result in a source tree while *Simonyi* teaches

- means for (Figs. 2A, 6) matching concept representatives to the user input to result (column 26, lines 23-39) in a source tree (column 20, lines 8-15)

Woodbury et al teaches,

- means for (page 48, paragraph 1) self-activating (Abstract) the source tree (page 48, paragraphs 3-4) to interpret the user input (page 50, paragraph 6 and page 51, paragraph 1)

Motivation - The portions of the claimed system would have been a highly desirable feature in this art for transforming an intentional program tree into a reduced program tree (*Simonyi*, Abstract) and explicitly specifying the conditions under which activation could occur (*Woodbury et al*, page 50, paragraph 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Maes* as taught by *Simonyi* and *Woodbury et al* for the purpose of transforming an intentional program tree into a reduced program tree and explicitly specifying the conditions under which activation could occur.

Regarding claim 40:

The rejection of claim 40 is the same as that for claim 39 as recited above since the stated limitations of the claim are set forth in the references.

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Regarding claim 41:

The rejection of claim 41 is the same as that for claims 39 and 27 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 43:

The rejection of claim 43 is similar to that for claim 39 as recited above since the stated limitations of the claim are set forth in the references. Claim 43's limitations difference is taught in *Simonyi*:

- the computer language code is in a machine executable form (column 1, lines 36-61)

Claims 31-33 and 44-48 are rejected under 35 U.S.C. 103(a) as being obvious over *Simonyi* in view of *Maes* and in further view of *Woodbury et al.*

Regarding claim 31:

Simonyi teaches,

- a computer usable medium having computer readable program code means embodied in the computer usable medium for causing an application program to execute on a computer system, the computer readable program code means comprising (column 1, lines 23-61, "Computer programs are...by the computer") :
- computer readable program code means for receiving the user input from a user (Figs. 2A, 6; column 5, lines 14-17, "The editor provides... IP tree 2B06")
- computer readable program code means for matching concept representatives to the user input to result (column 26, lines 23-39) in a source tree (column 20, lines 8-15)

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However, *Simonyi* doesn't explicitly teach computer readable program code means for matching concept representatives to the user input using experimentation to result in a source tree while *Maes* teaches,

- computer readable program code means for matching (page 148, section 4, paragraph 3 and page 149, left column, paragraph 1) concept representatives (page 151, left column, paragraph 2) to the user input using experimentation (page 150, section 6, paragraph 2; page 148, left column, paragraph 3)

Woodbury et al teaches,

- computer readable program code means for self-activating (Abstract) the source tree (page 48, paragraphs 3-4) to interpret the user input (page 50, paragraph 6 and page 51, paragraph 1)

Motivation - The portions of the claimed product would have been a highly desirable feature in this art for extending the language with meaningful constructs without stepping outside the interpreter (*Maes*, page 153, section 8, paragraph 8 and page 154, left column, paragraph 1) and explicitly specifying the conditions under which activation could occur (*Woodbury et al*, page 50, paragraph 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Simonyi* as taught by *Maes* and *Woodbury et al* for the purpose of extending the language with meaningful constructs and explicitly specifying the conditions under which activation could occur.

Regarding claim 32:

The rejection of claim 32 is the same as that for claim 31 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 33:

The rejection of claim 33 is the same as that for claims 31 and 27 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 44:

Simonyi teaches,

- a computer usable medium having computer readable program code means embodied in the computer usable medium for causing an application program to execute on a computer system, the computer readable program code means comprising (column 1, lines 23-61, "Computer programs are...by the computer") :
- computer readable program code means for receiving the user input from a user (Figs. 2A, 6; column 5, lines 14-17, "The editor provides... IP tree 2B06")
- computer readable program code means for matching concept representatives to the user input to result (column 26, lines 23-39) in a source tree (column 20, lines 8-15)

However, *Simonyi* doesn't explicitly teach computer readable program code means for matching concept representatives to the user input using experimentation to result in a source tree while *Maes* teaches,

- computer readable program code means for receiving the user input (page 148, section 3, paragraph 1) from a user (page 153, right column, paragraph 3)

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- computer readable program code means for matching (page 148, section 4, paragraph 3 and page 149, left column, paragraph 1) concept representatives (page 151, left column, paragraph 2) to the user input using experimentation (page 150, section 6, paragraph 2; page 148, left column, paragraph 3)

Woodbury et al teaches,

- computer readable program code means for self-activating (Abstract) the source tree (page 48, paragraphs 3-4) to interpret the user input (page 50, paragraph 6 and page 51, paragraph 1)

Motivation - The portions of the claimed product would have been a highly desirable feature in this art for extending the language with meaningful constructs without stepping outside the interpreter (*Maes*, page 153, section 8, paragraph 8 and page 154, left column, paragraph 1) and explicitly specifying the conditions under which activation could occur (*Woodbury et al*, page 50, paragraph 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Simonyi* as taught by *Maes* and *Woodbury et al* for the purpose of extending the language with meaningful constructs and explicitly specifying the conditions under which activation could occur.

Regarding claim 45:

The rejection of claim 45 is the same as that for claim 44 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 46:

The rejection of claim 46 is the same as that for claims 44 and 27 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 47:

The rejection of claim 47 is the same as that for claim 44 and 42 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 48:

The rejection of claim 48 is the same as that for claim 44 and 43 as recited above since the stated limitations of the claim are set forth in the references.

Claims 34-38 are rejected under 35 U.S.C. 103(a) as being obvious over *Simonyi* in view of *Maes*.

Regarding claim 34:

Simonyi teaches,

- receiving the user input from a user (Figs. 2A, 6; column 5, lines 14-17)
- matching concept representatives to the user input to result (column 26, lines 23-39) in a source tree (column 20, lines 8-15)
- to convert the user input into computer language code (column 3, lines 34-58)

However, *Maes* doesn't explicitly teach matching concept representatives to the user input using experimentation to result in a source tree while *Maes* teaches,

- receiving the user input (page 148, section 3, paragraph 1) from a user (page 153, right column, paragraph 3)

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- matching (page 148, section 4, paragraph 3 and page 149, left column, paragraph 1) concept representatives (page 151, left column, paragraph 2) to the user input using experimentation (page 150, section 6, paragraph 2; page 148, left column, paragraph 3)
- self-activating (page 148, section 3, paragraph 1) the source (page 154, left column, paragraph 2)

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for extending the language with meaningful constructs without stepping outside the interpreter (*Maes*, page 153, section 8, paragraph 8 and page 154, left column, paragraph 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Simonyi* as taught by *Maes* for the purpose of extending the language with meaningful constructs.

Regarding claim 35:

The rejection of claim 35 is the same as that for claim 34 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 36:

The rejection of claim 36 is the same as that for claims 34 and 27 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 37:

The rejection of claim 37 is the same as that for claim 34 and 42 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 38:

The rejection of claim 38 is the same as that for claims 34 and 43 as recited above since the stated limitations of the claim are set forth in the references.

RESPONSE TO APPLICANTS' AMENDMENT REMARKS

Objections - Information Disclosure Statement (IDS), Declaration, Specification

Applicant argues that the publication date for the De Remer et al reference in the 9/18/01 IDS is printed on the top of the second page of the reference and that the Supplemental IDS corrects the publication date of USPN 5,555,345 listed in the 5/14/01 IDS (Amendment REMARKS page 2, paragraph 2), the Application Data Sheet provides the correct and complete address for the second inventor (Amendment REMARKS page 2, paragraph 3), representing Blocks 13, 21, 37 and 56 as step 13, 21, 37 and 56 would lead to a linear and different interpretation of the figures than illustrated by the nonlinear flow chart (Amendment REMARKS page 2, last paragraph and page 3, paragraph 1) and that specification page 14, line 21 through page 15, line 20 describes the logic behind Fig. 10B (Amendment REMARKS page 3, paragraph 2). Applicant's arguments have been fully considered and are persuasive. The objections to the Declaration, Specification and IDS of 9-18/01 and 5/14/01 are withdrawn.

Claim Rejections - 35 USC § 102

Applicant argues that Simonyi USPN 5,911,072 doesn't teach receiving the input from a user as recited in the first element of claim 25 (Amendment REMARKS page 3, last paragraph), matching concept representatives to the user input using experimentation to result in a source tree as recited in the second element of claim 25 (Amendment REMARKS page 4, paragraph 2), self-activating the source tree to interpret the user input as recited in the third element of claim 25 (Amendment REMARKS page 4, paragraph 3), the structure positively recited in claim 25 (Amendment REMARKS page 4, paragraph 4) and that claims 26 and 27 are patentable for being dependent on claim 25 (Amendment REMARKS page 4, last paragraph and page 5, paragraph 1). Applicant's arguments have been fully considered, but are moot in view of the above new grounds of rejection. The examiner agrees that Simonyi alone does not disclose the methods of the inventions defined in claims 25-27 and withdraws the 35 USC 102(b) rejection of claims 25-27.

However, Maes "Concepts and experiments in computational reflection", Simonyi USPN 5,911,072 and Woodbury et al "Self-activation and representation in systems integration" are cited individually and in combination for explicitly and inherently disclosing the subject matter set forth in claims 25-27 by the applicants. The receiving the input from a user element of claim 25 is met in Maes page 148, section 3, paragraph 1 and page 153, right column, paragraph 3 while the matching concept representatives to the user input using experimentation to result in a source tree element of claim 25 is met in Maes page 148, section 4, paragraph 3, page 149, left column, paragraph 1,

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page 151, left column, paragraph 2, page 150, section 6, paragraph 2 and page 148, left column, paragraph 3 as well as Simonyi column 26, lines 23-39 and column 20, lines 8-15. The self-activating the source tree to interpret the user input element of claim 25 is met in Woodbury et al page 48, paragraphs 3-4, page 50, paragraph 6 page 51, paragraph 1 and the Abstract. Further, the motivation and purpose for modifying Maes is provided by Simonyi's Abstract, transforming an intentional program tree into a reduced program tree, and Woodbury et al page 50, paragraph 4, explicitly specifying the conditions under which activation could occur. Dependent claims 26 and 27 are rejected for being dependent on a rejected independent claim.

Applicant argues that Simonyi doesn't teach receiving the input from a user as recited in the first element of claim 28 (Amendment REMARKS page 5, paragraph 2), matching concept representatives to the user input using experimentation to result in a source tree as recited in the second element of claim 28 (Amendment REMARKS page 5, paragraph 3 and page 6, paragraph 1), self-activating the source tree to interpret the user input as recited in the third element of claim 28 (Amendment REMARKS page 6, paragraph 2), the structure positively recited in claim 28 (Amendment REMARKS page 6, paragraph 3) and that claims 29 and 30 are patentable for being dependent on claim 28 (Amendment REMARKS page 6, paragraph 4). Applicant's arguments have been fully considered, but are moot in view of the above new grounds of rejection. The examiner agrees that Simonyi alone does not disclose the systems of the inventions defined in claims 28-30 and withdraws the 35 USC 102(b) rejection of claims 28-30.

However, Maes, Simonyi and Woodbury et al are cited individually and in combination for explicitly and inherently disclosing the subject matter set forth in the claims by the applicants. The receiving the input from a user element of claim 28 is met in Maes page 148, section 3, paragraph 1 and page 153, right column, paragraph 3 while the matching concept representatives to the user input using experimentation to result in a source tree element of claim 28 is met in Maes page 148, section 4, paragraph 3, page 149, left column, paragraph 1, page 151, left column, paragraph 2, page 150, section 6, paragraph 2 and page 148, left column, paragraph 3 as well as Simonyi column 26, lines 23-39 and column 20, lines 8-15. The self-activating the source tree to interpret the user input element of claim 28 is met in Woodbury et al page 48, paragraphs 3-4, page 50, paragraph 6 page 51, paragraph 1 and the Abstract. Further, the motivation and purpose for modifying Maes is provided by Simonyi's Abstract, transforming an intentional program tree into a reduced program tree, and Woodbury et al page 50, paragraph 4, explicitly specifying the conditions under which activation could occur. Dependent claims 29 and 30 are rejected for being dependent on a rejected independent claim.

Applicant argues that Simonyi doesn't teach computer readable program code means for receiving the input from a user as recited in the first element of claim 31 (Amendment REMARKS page 7, paragraph 1), computer readable program code means for matching concept representatives to the user input using experimentation to result in a source tree as recited in the second element of claim 31 (Amendment REMARKS page 7, paragraph 2), computer readable program code means for self-

activating the source tree to interpret the user input as recited in the third element of claim 31 (Amendment REMARKS page 7, paragraph 3 and page 8, paragraph 1), the structure positively recited in claim 31 (Amendment REMARKS page 8, paragraph 2) and that claims 32 and 33 are patentable for being dependent on claim 31 (Amendment REMARKS page 8, paragraph 3). Applicant's arguments have been fully considered, but are moot in view of the above new grounds of rejection. The examiner agrees that Simonyi alone does not disclose the products of the inventions defined in claims 31-33 and withdraws the 35 USC 102(b) rejection of claims 31-33.

However, Maes, Simonyi and Woodbury et al are cited individually and in combination for explicitly and inherently disclosing the subject matter set forth in the claims by the applicants. The receiving the input from a user element of claim 31 is met in Maes page 148, section 3, paragraph 1 and page 153, right column, paragraph 3 while the matching concept representatives to the user input using experimentation to result in a source tree element of claim 31 is met in Maes page 148, section 4, paragraph 3, page 149, left column, paragraph 1, page 151, left column, paragraph 2, page 150, section 6, paragraph 2 and page 148, left column, paragraph 3 as well as Simonyi column 26, lines 23-39 and column 20, lines 8-15. The self-activating the source tree to interpret the user input element of claim 31 is met in Woodbury et al page 48, paragraphs 3-4, page 50, paragraph 6 page 51, paragraph 1 and the Abstract. Further, the motivation and purpose for modifying Simonyi is provided by Maes page 153, section 8, paragraph 8 and page 154, left column, paragraph 1, extending the language with meaningful constructs without stepping outside the interpreter, and

Woodbury et al page 50, paragraph 4, explicitly specifying the conditions under which activation could occur. Dependent claims 32 and 33 are rejected for being dependent on a rejected independent claim.

Applicant argues that Simonyi doesn't teach receiving the input from a user as recited in the first element of claim 34 (Amendment REMARKS page 8, last paragraph and page 9, paragraph 1), matching concept representatives to the user input using experimentation to result in a source tree as recited in the second element of claim 34 (Amendment REMARKS page 9, paragraph 2), self-activating the source tree to **interpret the user input** or to convert the user input into computer language code as recited in the third element of claim 34 (Amendment REMARKS page 9, paragraph 3 and page 10, paragraph 1), the structure positively recited in claim 34 (Amendment REMARKS page 10, paragraph 2) and that claims 35-38 are patentable for being dependent on claim 34 (Amendment REMARKS page 10, paragraph 3). Applicant's arguments have been fully considered, but are moot in view of the above new grounds of rejection. The examiner agrees that Simonyi alone does not disclose the systems of the inventions defined in claims 34-38, withdraws the 35 USC 102(b) rejection of claims 34-38 and notes that claim 34 offers no limitation directed at interpreting the user input.

However, Maes and Simonyi are cited individually and in combination for explicitly and inherently disclosing the subject matter set forth in the claims by the applicants. The receiving the input from a user element of claim 34 is met in Maes page 148, section 3, paragraph 1 and page 153, right column, paragraph 3 while the matching concept representatives to the user input using experimentation to result in a

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source tree element of claim 34 is met in Maes page 148, section 4, paragraph 3, page 149, left column, paragraph 1, page 151, left column, paragraph 2, page 150, section 6, paragraph 2 and page 148, left column, paragraph 3 as well as Simonyi column 26, lines 23-39 and column 20, lines 8-15. The self-activating source element of claim 34 is met in Maes page 148, section 3, paragraph 1 and page 154, left column, paragraph 2. Further, the motivation and purpose for modifying Simonyi is provided by Maes page 153, section 8, paragraph 8 and page 154, left column, paragraph 1, extending the language with meaningful constructs without stepping outside the interpreter. Dependent claims 35-38 are rejected for being dependent on a rejected independent claim.

Applicant argues that Simonyi doesn't teach receiving the input from a user as recited in the first element of claim 39 (Amendment REMARKS page 10, last paragraph and page 11, paragraph 1), means for matching concept representatives to the user input using experimentation to result in a source tree as recited in the second element of claim 39 (Amendment REMARKS page 11, paragraph 2), self-activating the source tree to interpret the user input as recited in the third element of claim 39 (Amendment REMARKS page 11, paragraph 3), the structure positively recited in claim 39 (Amendment REMARKS page 12, paragraph 1) and that claims 40-43 are patentable for being dependent on claim 39 (Amendment REMARKS page 12, paragraph 2). Applicant's arguments have been fully considered, but are moot in view of the above new grounds of rejection. The examiner agrees that Simonyi alone does not disclose

the methods of the inventions defined in claims 39-43 and withdraws the 35 USC 102(b) rejection of claims 39-43.

However, Maes, Simonyi, and Woodbury et al are cited individually and in combination for explicitly and inherently disclosing the subject matter set forth in claims 39-43 by the applicants. The receiving the input from a user element of claim 39 is met in Maes page 148, section 3, paragraph 1 and page 153, right column, paragraph 3 while the means for matching concept representatives to the user input using experimentation to result in a source tree element of claim 25 is met in Maes page 148, section 4, paragraph 3, page 149, left column, paragraph 1, page 151, left column, paragraph 2, page 150, section 6, paragraph 2 and page 148, left column, paragraph 3 as well as Simonyi column 26, lines 23-39 and column 20, lines 8-15. The self-activating the source tree to interpret the user input element of claim 25 is met in Woodbury et al page 48, paragraphs 3-4, page 50, paragraph 6 page 51, paragraph 1 and the Abstract. Further, the motivation and purpose for modifying Maes is provided by Simonyi's Abstract, transforming an intentional program tree into a reduced program tree, and Woodbury et al page 50, paragraph 4, explicitly specifying the conditions under which activation could occur. Dependent claims 40-43 are rejected for being dependent on a rejected independent claim.

Applicant argues that Simonyi doesn't teach computer readable program code means for receiving the input from a user as recited in the first element of claim 44 (Amendment REMARKS page 12, last paragraph and page 13, paragraph 1), means for matching concept representatives to the user input using experimentation to result in a

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source tree as recited in the second element of claim 44 (Amendment REMARKS page 13, paragraph 2), self-activating the source tree to interpret the user input as recited in the third element of claim 44 (Amendment REMARKS page 13, paragraph 3), the structure positively recited in claim 44 (Amendment REMARKS page 13, paragraph 4 and page 14, paragraph 1) and that claims 45-48 are patentable for being dependent on claim 44 (Amendment REMARKS page 14, paragraph 2). Applicant's arguments have been fully considered, but are moot in view of the above new grounds of rejection. The examiner agrees that Simonyi alone does not disclose the products of the inventions defined in claims 44-48 and withdraws the 35 USC 102(b) rejection of claims 44-48.

However, Maes, Simonyi and Woodbury et al are cited individually and in combination for explicitly and inherently disclosing the subject matter set forth in the claims by the applicants. The receiving the input from a user element of claim 44 is met in Maes page 148, section 3, paragraph 1 and page 153, right column, paragraph 3 while the matching concept representatives to the user input using experimentation to result in a source tree element of claim 44 is met in Maes page 148, section 4, paragraph 3, page 149, left column, paragraph 1, page 151, left column, paragraph 2, page 150, section 6, paragraph 2 and page 148, left column, paragraph 3 as well as Simonyi column 26, lines 23-39 and column 20, lines 8-15. The self-activating the source tree to interpret the user input element of claim 44 is met in Woodbury et al page 48, paragraphs 3-4, page 50, paragraph 6 page 51, paragraph 1 and the Abstract. Further, the motivation and purpose for modifying Simonyi is provided by Maes page 153, section 8, paragraph 8 and page 154, left column, paragraph 1, extending the

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language with meaningful constructs without stepping outside the interpreter, and Woodbury et al page 50, paragraph 4, explicitly specifying the conditions under which activation could occur. Dependent claims 45-48 are rejected for being dependent on a rejected independent claim.

As set forth above with regards to Maes, Simonyi and Woodbury et al, the items listed explicitly and inherently teach each element of the applicants' claimed limitations. Applicants have not set forth any distinction or offered any dispute between the claims of the subject application, Maes' Concepts and experiments in computational reflection, Simonyi's Method and system for reducing an intentional program tree represented by high-level computational constructs and Woodbury et al's Self-activation and representation in systems integration.

Conclusion

The following prior art made of record is considered pertinent to applicant's disclosure:

- *Hapner et al*; USPN 5,692,183; Methods and Apparatus for Providing Transparent Persistent in a Distributed Object Operating Environment

- *Lesser et al*; Organization of the Hearsay II speech understanding system; IEEE Transactions on Acoustics, Speech, and Signal Processing; Vol. 23, Is. 1; Feb 1975; pp

11-24

Any inquiry concerning this communication or earlier communications from the Office should be directed to Melvin Bell whose telephone number is 571-272-3680. This Examiner can normally be reached on Mon - Fri 7:30 am - 4:00 pm.

If attempts to reach this Examiner by telephone are unsuccessful, his supervisor, Anthony Knight, can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MB/AM-V,
December 20, 2004


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